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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	09/944,816
(use as many sheets as necessary)		Filing Date	August 31, 2001
		First Named Inventor	Jay W. Grate
		Group Art Unit	
		Examiner Name	
Sheet	1	of	1
		Attorney Docket Number	50005-50

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Application of Cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US-6,192,596 B1	02/27/2001	Bennett et al.	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.*	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s) publisher city and/or country where published	T ²
PMD		Chandler DP et al.; <u>Renewable microcolumns for solid-phase nucleic acid separations and analysis from environmental samples</u> ; <i>Trends in Analytical Chemistry</i> , Vol. 19, No. 5, 2000, pages 314-321.	
		Chandler DP et al.; <u>Automated immunomagnetic separation and microarray detection of <i>E. coli</i> O157:H7 from poultry carcass rinse</u> ; <i>International Journal of Food Microbiology</i> , Vol. 70, 2001, pages 143-154.	
		Chandler DP et al.; <u>Automated nucleic acid isolation and purification from soil extracts using renewable affinity microcolumns in a sequential injection system</u> ; <i>Talanta</i> Vol. 49, 1999, pages 969-983.	
PJM		Chandler DP et al.; <u>Automated nucleic acid isolation and purification from environmental samples with renewable affinity microcolumns in a microfluidic system</u> ; Abstracts of the General Meeting of the American Society for Microbiology; Chicago, IL, Vol. 99, 1999, page 496.	

Examiner Signature		Date Considered	9/26/05
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PTD		4,190,524	02/26/1980	Watson	
		4,208,277	06/17/1980	Lofthouse et al.	
		4,352,730	10/05/1982	Dijkhuis	
		4,375,407	03/01/1983	Kronick	
		4,664,796	05/12/1987	Graham et al.	
		5,106,491	04/21/1992	Schulze et al.	
		5,108,933	04/28/1992	Liberti et al.	
		5,128,043	07/07/1992	Wildermuth	
		5,200,084	04/06/1993	Liberti et al.	
		5,385,707	01/31/1995	Miltenyi et al.	
		5,405,752	04/11/1995	Nilsson	
		5,411,863	05/02/1995	Miltenyi	
		5,468,616	11/21/1995	Coulter et al.	
		5,541,072	07/30/1996	Wang et al.	
		5,543,289	08/06/1996	Miltenyi	
		5,567,326	10/22/1996	Ekenberg et al.	
		5,601,988	02/11/1997	Gordon	
PTD		5,616,250	04/01/1997	Johnson et al.	

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PTD		GB 2,015,900	09/19/1979			
		EP 0,318,913	06/07/1989			
		WO 00/25128	05/04/2000			
PTD		WO 00/50175	08/31/2000			

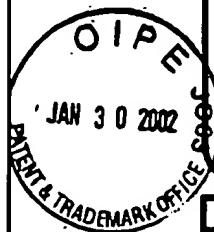
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PTD		5,622,831	04/22/1997	Liberti et al.	
		5,681,478	10/28/1997	Lea et al.	
		5,693,539	12/02/1997	Miltenyi et al.	
		5,698,271	12/16/1997	Liberti et al.	
		5,702,950	12/30/1997	Tajima	
		5,711,871	01/27/1998	Miltenyi	
		5,728,303	03/17/1998	Johnson	
		5,814,468	09/29/1998	Siiman et al.	
		5,876,593	03/02/1999	Liberti et al.	
		5,922,284	07/13/1999	Kinoshita et al.	
		5,925,573	07/20/1999	Colin et al.	
		5,972,721	10/26/1999	Bruno et al.	
		5,993,740	11/30/1999	Niiyama et al.	
		6,020,210	02/01/2000	Miltenyi	
		6,143,577	11/07/2000	Bisconte Sconte De Saint Julien	
		6,159,378	12/12/2000	Holman et al.	
		6,174,667	01/16/2001	Huchzermeier et al.	
		6,258,607	07/10/2001	Saito et al.	
PTD		2001/0008217	07/19/2001	Watkins et al.	

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(P)		Egorov O and Ruzicka J; <u>Flow Injection Renewable Fibre Optic Sensor System. Principle and Validation on Spectrophotometry of Chromium (VI)</u> ; Analyst, Vol. 120, July 1995, pgs. 1959-1962.	
(P)		Grate JW, Stebin R, Janata J; <u>Automated Analysis of Radionuclides in Nuclear Waste: Rapid Determination of ⁹⁰Sr by Sequential Injection Analysis</u> ; Analytical Chemistry, Vol. 68, No. 2, January 15, 1996, pgs. 333-340.	
(P)		Holman DA, Christian GD, Ruzicka J; <u>Titration without Mixing or Dilution: Sequential Injection of Chemical Sensing Membranes</u> ; Analytical Chemistry, Vol. 69, No. 9, May 1997, pgs. 1763-1765.	
(P)		Mayer M and Ruzicka J; <u>Flow Injection Based Renewable Electrochemical Sensor System</u> ; Analytical Chemistry, Vol. 68, No. 21, November 1, 1996, pgs. 3808-3814.	
(P)		Pollema, CH and Ruzicka J; <u>Flow Injection Renewable Surface Immunoassay: A New Approach to Immunoanalysis with Fluorescence Detection</u> ; Analytical Chemistry, Vol. 66, No. 11, June 1, 1994, pgs. 1825-1831.	
(P)		Pollema CH, Ruzicka J, and Christian GC; <u>Sequential Injection Immunoassay Utilizing Immunomagnetic Beads</u> ; Analytical Chemistry, Vol. 64, No. 13, July 1, 1992, pgs. 1356-1361.	
(P)		Ruzicka J, Pollema CH, and Scudder KM; <u>Jet ring Cell: A Tool for Flow Injection Spectroscopy and Microscopy on a Renewable Solid Support</u> ; University of Washington, October 7, 1993.	
(P)		Ruzicka, J; <u>Discovering Flow Injection: Journey From Sample to a Live Cell and From Solution to Suspension</u> ; Analyst, Vol. 119, September 1994, pgs. 1925-1934.	
(P)		Ruzicka J and Ivaska A; <u>Bioligand Interaction Assay by Flow Injection Absorptiometry</u> ; Analytical Chemistry, Vol. 69, No. 24, December 15, 1997, pgs. 5024-5030.	
(P)		Solé, S, Alegret S, Céspedes F, and Fàbregas E; <u>Flow Injection Immunoanalysis Based on a Magnetoimmunosensor System</u> ; Analytical Chemistry, Vol. 70, No. 8, April 15, 1998, pgs. 1462-1467.	
(P)		Willumsen B, Christian GD, and Ruzicka J; <u>Flow Injection Renewable Surface Immunoassay for Real Time Monitoring of Biospecific Interactions</u> ; Analytical Chemistry, Vol. 69, No. 17, September 1, 1997, pgs. 3482-3489.	
(P)		Radbruch, Andreas, <u>Cell Separation Methods and Applications</u> ; Marcel Dekker, Inc, New York, pages 192-195, pgs. 192-195.	

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